Climate Change and Human Health Literature Portal

National Institute of Environmental Health Sciences

Impact of climate change and air pollution on dyslipidemia and the components of metabolic syndrome

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Book: Dyslipidemia - From Prevention to Treatment
Year: 2012
Publisher: InTech (Rijeka, Croatia)

Abstract:

Environmental factors, notably climate change and air pollution influence health before conception, and continue during pregnancy, childhood, and adolescence. Experts have suggested that such health hazards may represent the greatest public health challenge humanity has faced. The accumulation of greenhouse gases such as carbon dioxide, primarily from burning fossil fuels results in warming, which has an impact on air pollution, particularly on levels of ozone and particulates. Heat-related health effects include increased rates of pregnancy complications, pre-eclampsia, eclampsia, low birth weight, renal effects, vector-borne diseases as malaria and dengue; increased diarrheal and respiratory disease, food insecurity, decreased quality of foods (notably grains), malnutrition, water scarcity, exposures to toxic chemicals, worsened poverty, natural disasters, and population displacement. Air pollution has many adverse health effects, which would have long-term impact on the components of the metabolic syndrome. In addition to short-term effects as premature labor, intrauterine growth retardation, neonatal and infant mortality rate, malignancies (notably leukemia and Hodgkin lymphoma), respiratory diseases, allergic disorders and anemia, exposure to criteria air pollutants from early life might be associated with dyslipidemia, increase in stress oxidative, inflammation and endothelial dysfunction which in turn might have long-term effects on chronic noncommunicable diseases.

Source:
http://www.intechopen.com/source/pdfs/27492/InTech-Impact_of_climate_change_and_air_pollution_on_dyslipidemia_and_the_components_of_metabolic_syndrome.pdf

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Temperature, Unspecified Exposure

Air Pollution: Ozone, Particulate Matter, Other Air Pollution

Air Pollution (other): CO;SO2;NOx

Temperature: Fluctuations

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Other Health Impact

Other Health Impact: dyslipedmia; metabolic syndrome

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified